Criteria 2:	Retain the greatest number of businesses and jobs
24.4	Number of commercial building displacements source: IDOT matrix distributed at 06/14/01 Socioeconomic meeting
	The alternates with the least negative impact on economic development would be those with the fewest commercial building displacements.
Criteria 3:	Maximize the creation of new businesses and jobs
24.4	Total employment impact source: Table 4-30 of the IDOT Socioeconomic Report
	The alternates with the least negative impact on economic development would be those that would generate the most new jobs.
Criteria 4:	Separate the local business traffic from the thru traffic as much as possible
22.2	Remaining traffic on current alignment (vehicle miles)

Longhollow alts. (1-2)	111,077
Irish Hollow alts. (3-10)	113,355
Expy. South Eleroy (11)	298.823
Expy. North Eleroy (12)	241,163

source: JDQ Engineers

The alternates with the least negative impact on economic development would be those with the least amount of traffic remaining on the current U.S. Route 20 alignment.

Results & Conclusions

The Economic Development Work Group determined that the following criteria, in weighted order of importance, should be utilized to assess the impacts of each four-lane highway alternate and to identify those alternates with the least negative impact on economic development.

- Provide for the safest route possible for business related transportation 28.9%
- Retain the greatest number of businesses and jobs 24.4%
- Maximize the creation of new businesses and jobs 24.4%
- Separate the local business traffic from the thru traffic as much as possible 22.2%

Impact Analysis

The process where each of the twelve alternate routes are scored to determine the one's having the least negative impact and most negative impact on economic development.

Methodology

Economic Development Work Group members determined which criteria could be measured quantitatively and which (if any) would need to be assessed with a relative value scale or a non-quantitative measure. IDOT technical studies, the Socioeconomic portion of the draft EIS, and other data received from various IDOT offices provided quantitative values for criteria measurement. The members then determined which particular data items should be used to measure each of the final four criteria.

Once the criteria were quantified, or ranked according to a values scale, each was given a relative impact score. Then, the appropriate weighting factor was applied to each relative impact score resulting in a weighted impact score. Finally, a preference score was calculated for each of the twelve alternate routes. The alternates with the lowest preference scores had the least negative impacts on economic development and therefore were the most acceptable from an economic development perspective.

See the attached table for the Economic Development Work Group's final Impacts Summary Sheet.

Results & Conclusion

With very little difference among the alternate preference scores for the ten freeway alignments, the Economic Development Work Group concludes that the freeway alignments have the least negative impact on economic development while the two expressway alignments have the greatest negative impact.

The Economic Development Work Group recommends a freeway alignment rather than an expressway alignment, and specifically, based on the Work Group's analysis of various interchange studies, and the impact analysis criteria, the **Irish Hollow Tunnel Freeway With South Simmons Mound Alternate**.

Due to the relatively insignificant differences among the alternate preference scores, and the analysis of various interchange studies, the Economic Development Work Group recommends this alternate because of the interchange location at Stockton. One conclusion of the interchange studies is that distance to town greatly affects economic development near predominantly rural interchanges.

The Economic Development Work Group would support any of the following alternate routes:

- Irish Hollow Tunnel Freeway With South Simmons Mound Alternate
- Upper Irish Hollow Tunnel Freeway With South Simmons Mound Alternate
- Irish Hollow Freeway With South Simmons Mound Alternate
- Upper Irish Hollow Freeway With South Simmons Mound Alternate
- Longhollow Freeway With South Simmons Mound Alternate

ECONOMIC DEVELOPMENT WORK GROUP
IMPACTS SUMMARY SHEET

GALENA TO FREEPORT

ALTERNATE ALIGNMENTS	CRITERIA (WEIGHT) BUSINESS TRAFFIC SAFETY (28.6%)	BUSINESS/JOB RETENTION (24.4%)	BUSINESS/JOB CREATION (24.4%)	BUSINESS TRAFFIC MIXING (22.2%)	ALTERNATE PREFERENCE SCORE
1. LONGHOLLOW FREEWAY WITH NORTH SIMMONS MOUND ALTERNATE					
RAW SCORE	0.389	3	6886	111077	
RELATIVE IMPACT SCORE	7.6	7.3	8.3	6.7	
WEIGHTED IMPACT SCORE	2.2	1.8	2.0	1.5	7.5
2. LONGHOLLOW FREEWAY WITH SOUTH SIMMONS MOUND ALTERNATE					
RAW SCORE	0.389	3	6857	111077	
RELATIVE IMPACT SCORE	7.6	7.3	8.4	6.7	
WEIGHTED IMPACT SCORE	2.2	1.8	2.0	1.5	7.5
3. IRISH HOLLOW FREEWAY WITH NORTH SIMMONS MOUND ALTERNATE					
RAW SCORE	0.389	3	7371	113355	
RELATIVE IMPACT SCORE	7.6	7.3	7.6	6.8	
WEIGHTED IMPACT SCORE	2.2	1.8	1.9	1.5	7.4
4. IRISH HOLLOW FREEWAY WITH SOUTH SIMMONS MOUND ALTERNATE					
RAW SCORE	0.389	3	7342	113355	
RELATIVE IMPACT SCORE	7.6	7.3	7.6	6.8	
WEIGHTED IMPACT SCORE	2.2	1.8	1.9	1.5	7.4
5. IRISH HOLLOW TUNNEL FREEWAY WITH NORTH SIMMONS MOUND ALTERNATE					
RAW SCORE	0.389	3	7514	113355	
RELATIVE IMPACT SCORE	7.6	7.3	7.6	6.8	
WEIGHTED IMPACT SCORE	2.2	1.8	1.9	1.5	7.4
6. IRISH HOLLOW TUNNEL FREEWAY WITH SOUTH SIMMONS MOUND ALTERNATE					
RAW SCORE	0.389	3	7485	113355	
RELATIVE IMPACT SCORE	7.6	7.3	7.7	6.8	
WEIGHTED IMPACT SCORE	2.2	1.8	1.9	1.5	7.4
7. UPPER IRISH HOLLOW FREEWAY WITH NORTH SIMMONS MOUND ALTERNATE					
RAW SCORE	0.389	3	7256	113355	
RELATIVE IMPACT SCORE	7.6	7.3	7.9	6.8	
WEIGHTED IMPACT SCORE	2.2	1.8	1.9	1.5	7.4
8. UPPER IRISH HOLLOW TUNNEL FREEWAY WITH NORTH SIMMONS MOUND ALTERNATE					
RAW SCORE	0.389	3	7398	113355	
RELATIVE IMPACT SCORE	7.6	7.3	7.8	6.8	
WEIGHTED IMPACT SCORE	2.2	1.8	1.9	1.5	7.4
9. UPPER IRISH HOLLOW FREEWAY WITH SOUTH SIMMONS MOUND ALTERNATE					
RAW SCORE	0.389	3	7227	113355	
RELATIVE IMPACT SCORE	7.6	7.3	8.0	6.8	
WEIGHTED IMPACT SCORE	2.2	1.8	2.0	1.5	7.5
10. UPPER IRISH HOLLOW TUNNEL FREEWAY WITH SOUTH SIMMONS MOUND ALTERNATE					
RAW SCORE	0.389	3	7370	113355	
RELATIVE IMPACT SCORE	7.6	7.3	7.8	6.8	
WEIGHTED IMPACT SCORE	2.2	1.8	1.9	1.5	7.4
11. EXPRESSWAY SOUTH ELEROY ALTERNATE					
RAW SCORE	0.620	8	5382	256823	
RELATIVE IMPACT SCORE	12.1	14.6	10.7	17.9	
WEIGHTED IMPACT SCORE	3.5	3.6	2.6	4.0	13.7
12. EXPRESSWAY NORTH ELEROY ALTERNATE					
RAW SCORE	0.620	5	5643	241183	
RELATIVE IMPACT SCORE	12.1	12.2	10.2	14.4	
WEIGHTED IMPACT SCORE	3.5	3.0	2.5	3.2	12.2
TOTAL RELATIVE IMPACT SCORES	100	100	100	100	
TOTAL WEIGHTED IMPACT SCORES	28.9	24.4	24.4	22.2	100

Note: 1) Raw scores were updated in August 2001.
2) Total scores may vary due to rounding.

Economic Development Work Group

Impacts Summary

Rank	Alt. Preference Score	Alignment
T1	7.4	Irish Hollow Tunnel Fwy. With North Simmons Mound Alt.
T1	7.4	Irish Hollow Tunnel Fwy. With South Simmons Mound Alt.
T1	7.4	Upper Irish Hollow Tunnel Fwy. With North Simmons Mound Alt.
T1	7.4	Upper Irish Hollow Tunnel Fwy. With South Simmons Mount Alt.
T1	7.4	Irish Hollow Fwy. With North Simmons Mound Alt.
T1	7.4	Irish Hollow Fwy. With South Simmons Mound Alt.
T1	7.4	Upper Irish Hollow Fwy. With North Simmons Mound Alt.
T8	7.5	Upper Irish Hollow Fwy. With South Simmons Mound Alt.
T8	7.5	Longhollow Fwy. With North Simmons Mound Alt.
T8	7.5	Longhollow Fwy. With South Simmons Mound Alt.
11	12.2	Expressway North Eleroy Alt.
12	13.7	Expressway South Eleroy Alt.

Other Criteria Scoring Scenarios

In the course of determining the specific measurements that should be applied to each criteria, the Economic Development Work Group generated six "other" scoring scenarios using various combinations of measures.

The following table is a summary of this process. As can be seen, the pattern remains generally the same as with the final, approved impact analysis.

The next table titled, "Criteria Scoring Analysis & the Measurements" is a summary of the measures used in each criteria scoring scenario.

6 Other Criteria Scoring Scenarios

Avg. Alternate Pref. Score	Rank	Alternate
6.02	1	#5 – Irish Hollow Tunnel Fwy. w/North Simmons Mound
6.33	2	#6 – Irish Hollow Tunnel Fwy. w/South Simmons Mound
6.70	3	#8 – Upper Irish Hollow Tunnel Fwy. w/North Simmons Mound
6.98	4	#3 – Irish Hollow Fwy. w/North Simmons Mound
7.32	5	#10 – Upper Irish Hollow Tunnel Fwy. w/South Simmons Mound
7.57	6	#4 – Irish Hollow Fwy. w/South Simmons Mound
7.98	7	#7 – Upper Irish Hollow Fwy. w/North Simmons Mound
8.25	8	#9 – Upper Irish Hollow Fwy. w/South Simmons Mound
8.55	9	#1 – Longhollow Fwy. w/North Simmons Mound
8.82	10	#2 – Longhollow Fwy. w/South Simmons Mound
12.20	11	#12 – Expressway w/North Eleroy
13.00	12	#11 – Expressway w/South Eleroy

Economic Development Work Group – Criteria Scoring Analysis Versions & the Measurements

Version	Business Traffic Safety	Business/Employment Retention	Business/Employment Creation	Business Traffic Mixing
Weight	28.9	24.4	24.4	22.2
1.	Fwy: Highly Beneficial = 1 Expy: Moderately Bene = 2	Number of Commercial Building Displacements	Number of Jobs Created	Fwy: Highly Beneficial = Expy: Moderately Bene =
2.	Fwy: Highly Beneficial = 1 Expy: Highly Beneficial = 1	Number of Commercial Building Displacements	Number of Jobs Created	Fwy: Highly Beneficial = Expy: Highly Beneficial =
3.	Fwy: Highly Beneficial = 1 Expy: Moderately Bene = 2	Maintenance of Traffic During Construction	Number of Jobs Created	Fwy: Highly Beneficial = Expy: Moderately Bene =
4.	Fwy: Highly Beneficial = 1 Expy: Highly Beneficial = 1	Number of Commercial Building Displacements	Number of Jobs Created	Fwy: Highly Beneficial = Expy: Moderately Bene =
5.	Fwy: Highly Beneficial = 1 Expy: Moderately Bene = 2	Number of Commercial Building Displacements	Number of Jobs Created	Fwy: Highly Beneficial = Expy: Highly Beneficial =
6.	Fwy: Highly Beneficial = 1 Expy: Highly Beneficial = 1	Maintenance of Traffic During Construction	Number of Jobs Created	Fwy: Highly Beneficial = Expy: Highly Beneficial =
7.	Rural Fwy/Rural Expy Accident Rates	Number of Commercial Building Displacements	Number of Jobs Created	Traffic Remaining on Existing Alignment

Note: Version 7 is the Preferred Version

Prepared: June 2001 (complete criteria descriptions and measures are attached)

U.S. Route 20 Environment Work Group

Report to the Advisory Council

Jim Gitz
Chairperson

Jim Rachuy
Advisory Council Representative

July 26, 2001

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Executive Summary

Based on our methodology for evaluating field data, the Environmental Work Group has concluded that the "Longhollow Freeway With North and South Simmons Mound Alternates" have the lowest alternate preference score and thus the least detrimental impact on the environment.

We therefore recommend, within the scope of this project, the selection of one of the two Longhollow alternates. More specifically, we find we cannot support the use of Irish Hollow or Upper Irish Hollow for a freeway or an expressway.

A complete ranking of all the alignments is provided below. The most preferred alignment is ranked "1" and the least preferred alignment is ranked "12."

Impacts Summary Table

Rank	Alignment	Score
1	Longhollow, Simmons Mound North (1)	6.1
1	Longhollow, Simmons Mound South (2)	6.1
3	Upper Irish, Simmons Mound South (9)	8.3
3	Irish Hollow, Simmons Mound South (4)	8.3
5	Irish Hollow, Tunnel, Simmons Mound N (5)	8.4
6	Irish Hollow, Tunnel, Simmons Mound S (6)	8.5
7	Upper Irish, Simmons Mound North (7)	8.6
7	Irish Hollow, Simmons Mound North (3)	8.6
9	Upper Irish, Tunnel, Simmons Mound N (8)	8.8
10	Upper Irish, Tunnel, Simmons Mound S (10)	8.9
11	Expressway, Eleroy South (11)	9.7
12	Expressway, Eleroy North (12)	9.8

Introduction

Eight years ago, at a Public Information Meeting on June 17, 1993, the Illinois Department of Transportation (IDOT) called for citizens throughout Jo Daviess and Stephenson Counties to become involved in the preparation of an Environmental Impact Statement (EIS) for a four-lane U.S. Route 20 highway, Glacier Shadow Pass, in northwest Illinois.

A total of 179 local residents attended the meeting. Everyone was asked to identify his or her primary area of interest in the region—agriculture, economic development, environment, government or tourism—and join a U.S. Route 20 Work Group to help IDOT assess the impacts of a new four-lane highway.

Those interested in joining a Work Group, around 111 individuals, met in five separate sessions. Each Work Group was asked by a facilitator to name a temporary contact person or interim coordinator for mailings and meeting notices prior to selection of a permanent chairperson and an Advisory Council representative.

Both would serve on the U.S. Route 20 Advisory Council which would assess impacts on the region as a whole and prepare recommendations regarding individual alignments for IDOT at the conclusion of the four-lane highway study. Each Work Group was asked to help identify others who might be interested in joining the public involvement effort.

To carry out their missions, the Work Groups were told they could use data from IDOT's engineering and environmental design technical studies and any other information they deemed appropriate to developing and refining criteria against which the proposed four-lane alternatives could be evaluated.

In addition, Work Groups were asked to participate in an initial exercise to identify three major concerns or impacts of building a four-lane highway on their interest areas. They would report on these issues when they reconvened in the fall.

Participants were told that at the end of the project study, each Work Groups would prepare a report outlining its criteria for assessing impacts and how members weighted and prioritized the criteria and then utilized them to identify alignments having the fewest negative impacts on their interest areas.

The Advisory Council would utilize the Work Groups' conclusions along with any other impacts they deemed important and formulate a regional perspective on the effects of impacts from building each alignment. Advisory Council members would prioritize alignments, focusing on those with the fewest negative impacts.

Finally, the Advisory Council would present its conclusions in a report to IDOT at the culmination of the agency's public involvement effort. The document would be included in the draft and final EIS upon which the Federal Highway Administration (FHWA) would base its decision about the construction of a four-lane highway in northwest Illinois.

To these ends, Work Group members began to meet periodically to carry out the task of impact assessment and analysis.

Work Group History

The Environment Work Group met initially to elect officers and to discuss its mission, objectives, and organization and to begin identifying issues and criteria of primary interest for maintaining the environment integrity of the region.

Meetings

1993 Meeting Topics

Election of Officers: Jim Gitz of Freeport, Chair; Jim Rachuy of Stockton, Advisory Council Representative; Sophie Fiedler of Galena, Secretary.

Constitution and by-laws, conflict resolution strategies, budget, establishment of ad-hoc subcommittee to develop questions for IDOT, Work Group functions questionnaire for members, strategic Work Group interaction with IDOT and the media, mailing list development, questions about the purpose and need for a four-lane highway, member perceptions of the continued viability of the Work Group, information on other highway projects nation-wide.

Initial identification of the Work Group's top issues for analysis of highway impacts:

> Determine whether the highway should be built
>
> If built, influence the government's choice of a corridor
>
> If built, protect natural areas, restore the corridor, and secure long-term management commitments (including funding)
>
> Ensure the public is thoroughly and promptly informed of IDOT plans

Safety and reasons to build highway, IDOT accident and traffic reports, interface with elected officials, existing highway 20 as a viable four-lane highway, state and federal highway funding, interests in common with other Work Groups, a list from IDOT of potential areas of conflict, IDOT environmental impact studies, IDOT survey on need for a highway, IDOT District Engineer as Advisory Council Chair, Work Group Chair's bid for public office, media coverage of project study and public relations.

1994 Meeting Topics

Work Group mission statement, course of action for 1994-5, natural resources presentations by Randy Nyboer of the Illinois Department of Natural Resources and John Alessandrini of the Illinois Nature Preserves Commission, Jo Daviess County hill prairie survey by the Natural Area Guardians, environmental impact definitions, twenty questions for IDOT, comments on the first draft purpose and need statement, interface with Advisory Council.

Work Group membership and voting rules, "20 plus questions" for IDOT, traffic volume and truck traffic, accident reports and alternate alignments presentation, statement requesting IDOT study viability of upgrading existing U.S. Route 20 with passing lanes and bypasses, IDOT's five-year improvement plan for U.S. Route 20, rail transportation plans, previous northern corridor highway study, a preliminary inventory by Work Group volunteers of natural resources on private property within the study area.

IDOT contracts for all environmental studies, threatened and endangered species location map, fog monitoring, air quality, noise pollution, Galena Territory interchange considerations, presentation by Bill Handel of the Illinois Natural History Survey on natural resources in the proposed U.S. Route 20 corridors and environmental sensitivity of Irish Hollow and Longhollow alignments, letter to IDOT requesting alternate alignments including one north of the Galena Territory between Elizabeth and Galena.

1995 Meeting Topics

Public input process, definition of voting member, premature endorsement by the Work Group of an alignment, IDOT commitment to complete an in-house study of an expressway on the existing U.S. Route 20 alignment, comparative information for all alignment studies, 70 mile-per-hour design speed, element occurrence and sighting report form for threatened and endangered species, rare natural resources study report for Jo Daviess and Stephenson Counties, information gathering techniques, landowner participation in research, compilation and evaluation of information.

Revised Work Group mission statement, interface with Freeway Watch Committee engineer, methodology for prioritizing environmental concerns, alignment segments versus entire alignment, IDOT commitment and FHWA funding to study Snipe Hollow alignment north of the Galena Territory, goals and objectives development, environmental hot spots.

1996 Meeting Topics

Expressway alternative along existing U.S. Route 20, differences between a freeway and an expressway, diamond versus cloverleaf interchanges, an expressway for the Galena bypass with freeway option, limitations of existing highway for use as an expressway, cost of an expressway, the Galena bypass, Tapley Woods preservation and "4f" status, Tapley Woods bypass, interchange lighting, deer accidents and safety.

Waivers from existing highway construction standards for percent grade, the "no build" alternative, goals and objectives to prioritize environmental concerns, IDOT accident rate corrections, methodology for criteria selection to evaluate environmental impacts of alternatives, mailing of core criteria to Work Group members for prioritization, quantitative and qualitative comparisons, requests to IDOT for quantitative information.

Report by Bill Handel of the Illinois Natural History Survey on biological resources in study corridor, including the Snipe, Irish and Longhollow alignments and Tapley Woods; avoidance of environmental hot spots, Lake Galena impacts, air quality studies, wetlands protection, IDOT fog study, noise pollution study, visual impact assessment, O&D traffic study, ADT for 1994 and 1995, ice caves, fragile plant and animal populations, timber rattlesnakes, river otters.

1997 - 1998 Meeting Topics

Work Group revision of core criteria, results of criteria selection for evaluating alternatives, traffic and accident data for 1980 through 1995, environmental study report status, schedule for public review of draft EIS, Congressional testimony and General Assembly priorities for funding four-lane construction, a diamond interchange requiring 70 acres, air quality and noise study criteria, scenic impact assessment.

IDOT update of alignment studies, Advisory Council conclusions as part of the draft and final EIS, concern with project study slow-down, quantitative and qualitative measurements for each criteria and information needs, IDOT matrix for comparison of study data on freeway and expressway alignments, comparison of IDOT matrix parameters with Work Group criteria, public scoping meeting and agency comments in the EIS.

1999 - Present Meeting Topics

Scenic study review with Tourism Work Group, report by Bill Handel of the Illinois Natural History Survey studies, Tapley Woods "4f" designation, rattlesnake habitat in Tapley Woods, bird migration, wetlands affected, quantification of secondary and tertiary impacts, quantifying large ecosystems with transitional boundaries, environmental information needs for the criteria matrix, Tourism Work Group model for scenic values preservation, added data needs, measuring pollutant effects and number of species affected per alignment, cut and fill materials required for construction of each alignment.

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